

ABSTRACT

A bi-directional shift register circuit comprising, a plurality of shift registers, each having an input and an output terminal, and a bi-directional shift controller circuit associated with each of said shift registers is disclosed. The bi-directional shift controller circuit comprises a first input connected to a first shift register output terminal and a second input connected to a second shift register output terminal. means to apply a first and a second control voltage, wherein said first and second control voltage are different, and a combinatorial circuit responsive to said first and second control voltages to apply an indication of an input received from either said first shift register or said second shift register to said corresponding shift register input terminal. The combinatorial circuit configuration is that of a NOR gate or a NAND gate.